



CITY OF RENTON
PLANNING/BUILDING/
PUBLIC WORKS DEPARTMENT
CUSTOMER SERVICES DIVISION
CONSTRUCTION SERVICES SECTION

SIDE SEWER INSTALLATION INFORMATION HANDOUT

IT IS THE INTENT OF THE FOLLOWING POLICIES TO OBTAIN SATISFACTORY WORK WITH A MINIMUM OF DELAY TO ALL PARTIES CONCERNED.

DEFINITIONS:

Building Sewer or Side Sewer - The pipe extending from the building drain to the public sanitary sewer main.

Side Sewer Stub - That portion of the building sewer between primary collection lines and individual property lines.

1. Any work within the street right-of-way requires an additional, separate permit and bond, and work must be performed by a licensed, bonded contractor. A traffic control plan, approved by the Transportation Division, will be required.
2. Acceptable procedures for side sewer connections to main lines:
 - a. Vitrified clay - Re-sectioned with caulder couplings.
 - b. Concrete - Core drilled with a Romax saddle.
 - c. PVC - Re-sectioned with rigid couplings or a Romax saddle on an appropriately cut hole.
 - d. Ductile Iron - Core drilled with a Romax saddle.All connections to new or existent concrete structures will be at manufactured knock-outs or the structure is to be core-drilled.
3. For inspection call, 24 hours in advance, 425-430-7203. Be prepared to give Permit Number, location of inspection, type of inspection, contact person (with phone number), and AM or PM inspection request. General information may be obtained by calling Customer Service at 425-430-7200.
4. There will be no guarantee of re-inspection on the same day for any work which is not ready at the time of the scheduled inspection.
5. Sanitary building and side sewers, shall be bedded with "Bedding Material for Flexible Pipe", as adopted by the City of Renton (standard Details page B003).
6. Building sewer and side sewer stubs will be tested from the point of origin to and through the house connection by one of the following methods:
 - a. Water - fill test.
 - b. Low Pressure Air - WSDOT Specification current edition, as adopted and amended by the City of Renton Supplement to the Specifications.
7. In all cases where men, equipment, or material will in any way obstruct vision or inhibit normal traffic flow, an approved Traffic Control Plan providing adequate signs and flagmen will be required to protect motorists and pedestrians. In addition, 24 hours prior to any work being performed within the street right-of-way, Valley Communications Center (911) shall be contacted through one of the following numbers:

Valley Communications Center (via land line telephone)..... 911
Valley Communications Center (via cell phone) (253) 852-2121
8. In the event difficult street crossings must be constructed in more than one continuous operation, the Construction Services Section will endeavor to provide an inspector during each phase of construction, so long as the Construction Services Section is contacted 24 hours in advance via the Inspection Request Line at 425-430-7203.
9. Restoration of street trenches shall be accomplished per the City of Renton's adopted Trench Restoration and Street Overlay Requirements. The Utility may require that controlled density backfill be used when crossing an arterial, newly constructed or newly reconstructed roadways.
10. Upon completion of connection to public sewer mains where septic tanks have previously served the property, the owner shall either abandon and fill said septic tank with a suitable material or suitably clean said septic tank to use in connection with adjoining drain field systems for the disposal of storm water.

SPECIFICATIONS FOR BUILDING SEWERS:

The building sewer shall be ductile iron pipe class 50, PVC plastic pipe ASTM spec. D3034 or equal, or other suitable material approved by the Utilities Engineer. Any part of the building sewer that is located within ten feet (10') of a water service pipe shall be constructed of ductile iron pipe with push-on rubber gasket joints. If installed in filled or unstable ground, the building sewer shall be of ductile iron pipe with push-on rubber gasketed joints.

Joints shall be tight and waterproof. All joints and connections shall be made gastight and watertight, and installed in accordance with APWA spec. 62-3.98A. Ductile iron pipe push-on joints shall conform with ANSI A-21.11. PVC pipe joints shall conform with ASTM D 2680. Other jointing materials and methods may be used only by written approval of the Utilities Engineer.

The size and slope of the building sewer shall be subject to the approval of the Utilities Engineer. The standard minimum sizes and slopes are:

- A. Four inches (4") at a two percent (2%) slope (1/4" per foot) for single-family or duplex residential, or
- B. Six inches (6") at a two percent (2%) slope (1/4" per foot) for multi-family, commercial or industrial.

In no event shall the diameter of the side sewer stub be less than six inches (6").

The utility may allow, under certain circumstances, a six inch (6") side sewer to be laid at no less than one percent (1%) (1/8" per foot). A grade release holding the City harmless for the flatter slope will be required.

Whenever possible, the building sewer shall be brought to the building at an elevation below the basement floor. No building sewer shall be laid parallel to or within three feet (3') of any bearing wall, which might thereby be weakened. The depth shall be sufficient to afford protection from frost. The building sewer shall be laid at uniform grade and in straight alignment insofar as possible. Changes in direction shall be made with proper fittings per City standards. The wastewater utility may allow, at its discretion, the installation of a six inch (6") building sewer properly curved not to exceed one-half (1/2) of manufacturer's specifications.

In all buildings in which any building drain is too low to permit gravity flow to the public sewer, sanitary sewage carried by such drain shall be lifted by approved artificial means and discharged to the building sewer.

All excavations required for the installation of a building sewer shall be open trench work unless otherwise approved by the Utilities Engineer. Pipe laying and backfill shall be performed in accordance with ASTM spec. C12-19 and APWA spec. Sec. 60 except that no backfill shall be placed until the work has been inspected.

INSPECTION NOTICE

Prior to the start of construction activities, telephone:

425-430-7203

a minimum of 24 hours in advance of required inspections.

Inspection requests for the following workday must be received no later than 3:00 pm.

Upon dialing, you will receive a recorded message asking for your inspection request. At the tone, relay your request including the following information:

1. Your PERMIT Number (ie C-000000) or, in cases of City project, the Project Identification. (Inspections will not be scheduled without proper identification).
2. Location of requested inspection. (Street Address, Street Intersection, etc.)
3. Type of inspection requested. (Concrete, earthwork, drainage, sewer, field meeting, etc.)
4. Name of person to contact and day-time phone number.
5. Approximate time of requested inspection - AM or PM. (Due to a variable workload, inspections cannot be scheduled for specific hours. The only exception is inspections that require the scheduling of special testing personnel, observing consultants, or other time-restraining factors approved by the Inspector in advance. Inspections will be scheduled in the order received to the limit of available man hours.

NOTE: The **ONLY** exception to the 24 Hour Minimum scheduling requirement is in cases of bonafide Emergencies. In cases of true Emergencies (broken utilities, urgent traffic control problems, etc.), telephone:

425-430-7200

and ask to speak to the assigned Inspector (by name if possible). An attempt will be made to contact the Inspector or, if that Inspector is unavailable, to assign an Emergency Inspector to handle the problem. Note: this procedure is to be used for real Emergencies **ONLY**. Your failure to adequately schedule your operations to allow for advance requests does not constitute an Emergency!!

YOU WILL BE CHARGED FOR THE INSPECTOR'S TIME IF THE PROBLEM IS NOT AN EMERGENCY!

		6 IN. DIAMETER PIPE										
8 IN. DIAMETER PIPE	LENGTH(FT)	0	50	100	150	200	250	300	350	400	450	500
	0	0	20	40	59	79	99	119	139	158	170	170
	50	35	55	75	95	114	134	154	174	178	177	177
	100	70	90	110	130	150	169	187	186	184	183	182
	150	106	125	145	165	185	195	193	191	189	187	186
	200	141	161	180	200	202	199	197	195	193	191	190
	250	176	196	214	209	205	202	200	198	196	194	193
	300	211	220	215	211	208	205	202	200	198	197	195
	350	227	221	217	213	210	207	205	202	201	199	197
	400	227	222	218	214	211	209	206	204	202	201	199
450	227	222	219	215	213	210	208	206	204	202	201	
TIME (SECONDS)												

		6 IN. DIAMETER PIPE										
10 IN. DIAMETER PIPE	LENGTH(FT)	0	50	100	150	200	250	300	350	400	450	500
	0	0	20	40	59	79	99	119	139	158	170	170
	50	55	75	95	114	134	154	174	192	190	188	186
	100	110	130	150	169	189	209	210	207	203	201	198
	150	165	185	205	224	233	227	222	217	214	210	208
	200	220	240	257	248	241	235	230	225	222	218	215
	250	275	271	261	253	247	241	236	232	228	225	222
	300	283	273	264	257	251	246	241	237	233	230	227
	350	283	274	267	260	254	249	245	241	237	234	231
	400	283	275	269	263	257	252	248	244	241	238	235
450	283	276	270	264	259	255	251	247	244	241	238	
TIME (SECONDS)												

		6 IN. DIAMETER PIPE										
		0	50	100	150	200	250	300	350	400	450	500
12 IN. DIAMETER PIPE	LENGTH(FT)	0	20	40	59	79	99	119	139	158	170	170
	50	79	99	119	139	158	178	198	208	204	201	198
	100	158	178	198	218	238	246	238	232	227	222	219
	150	238	257	277	283	272	263	255	248	243	238	234
	200	317	321	306	294	283	275	267	261	255	250	246
	250	340	325	312	301	291	283	276	270	264	259	255
	300	340	327	316	306	298	290	283	277	272	267	263
	350	340	329	319	310	302	295	289	283	278	274	269
	400	340	330	321	313	306	300	294	288	283	279	275
	450	340	331	323	316	309	303	298	292	288	283	279
		TIME (SECONDS)										

		6 IN. DIAMETER PIPE										
15 IN. DIAMETER PIPE	LENGTH(FT)	0	50	100	150	200	250	300	350	400	450	500
	0	0	20	40	59	79	99	119	139	158	170	170
	50	124	144	163	183	203	223	243	237	231	225	221
	100	247	267	287	307	312	298	286	276	268	261	255
	150	371	391	371	352	336	323	312	302	293	286	279
	200	425	402	383	366	352	340	329	320	312	304	298
	250	425	406	390	376	363	352	342	333	326	318	312
	300	425	409	395	383	371	361	352	344	336	329	323
	350	425	411	399	388	378	368	360	352	345	338	332
	400	425	413	402	392	383	374	366	359	352	346	340
450	425	414	404	395	387	379	371	365	358	352	347	
TIME (SECONDS)												

PROCEDURE:

SLOWLY PRESSURIZE THE PIPE TO 4.0 P.S.I.G.
 ALLOW 2 MINUTES FOR STABILIZATION, ADDING AIR AS REQUIRED.
 TIME THE DROP FROM 3.5 P.S.I.G. TO 2.5 P.S.I.G.
 READ THE MAXIMUM ALLOWABLE TIME IN SECONDS FROM THE TABLES.

AIR TEST TABLE (LOW PRESSURE)
 FOR SEWER MAINS



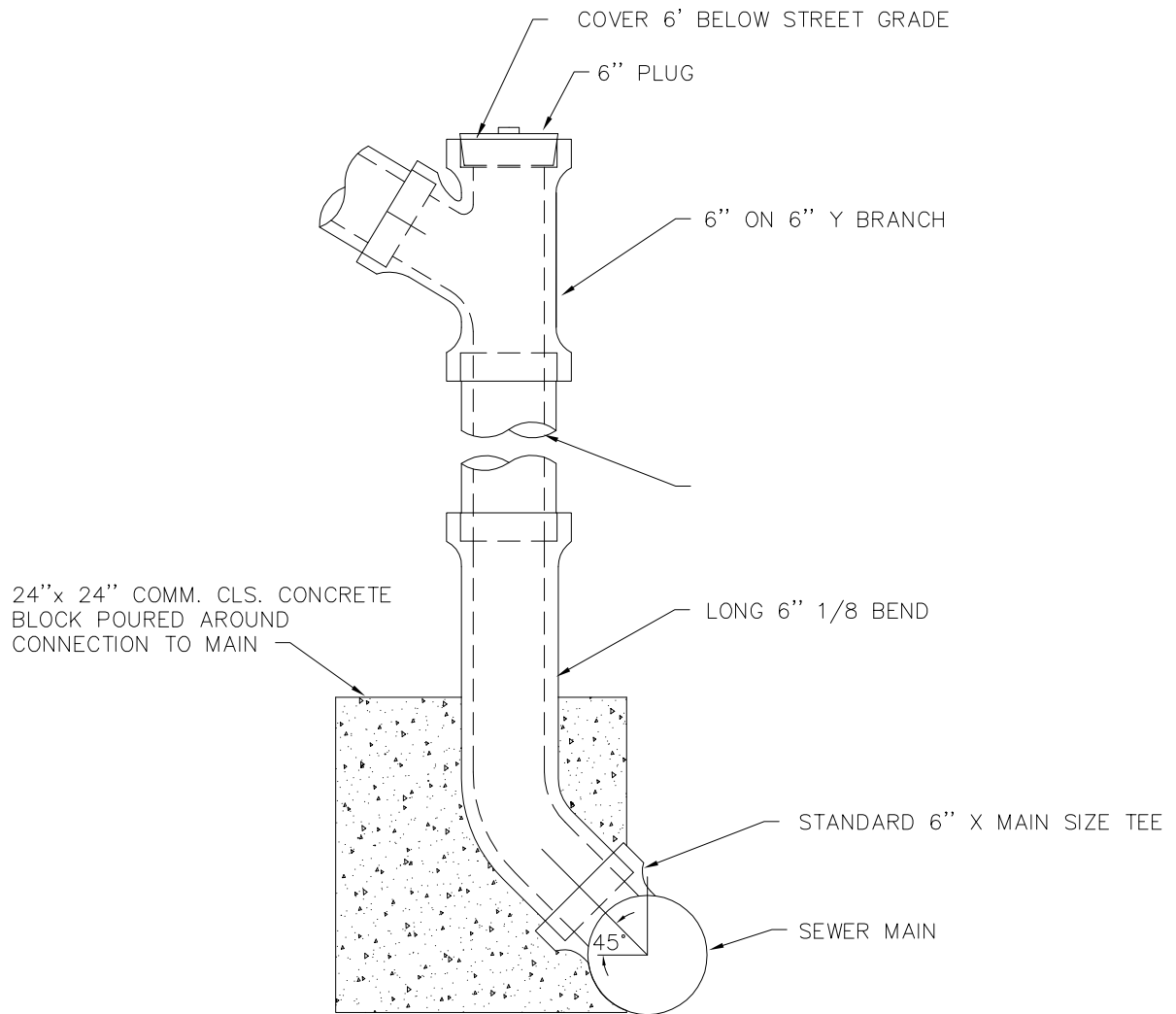
ADOPTED
 CITY OF RENTON

STANDARD PLANS
 LST DATE: 12/96

DATE	REVISION	BY	APPR'D

DWG. NAME: BR07

SP PAGE: B083



NOTE:
DO NOT USE WITHOUT WRITTEN
APPROVAL OF THE WASTEWATER
UTILITY.

NOTE:
TO RAISE TO GRADE
USE STANDARD 6" SEWER PIPE

SIDE SEWER RISER CONNECTION
TO SEWER MAIN



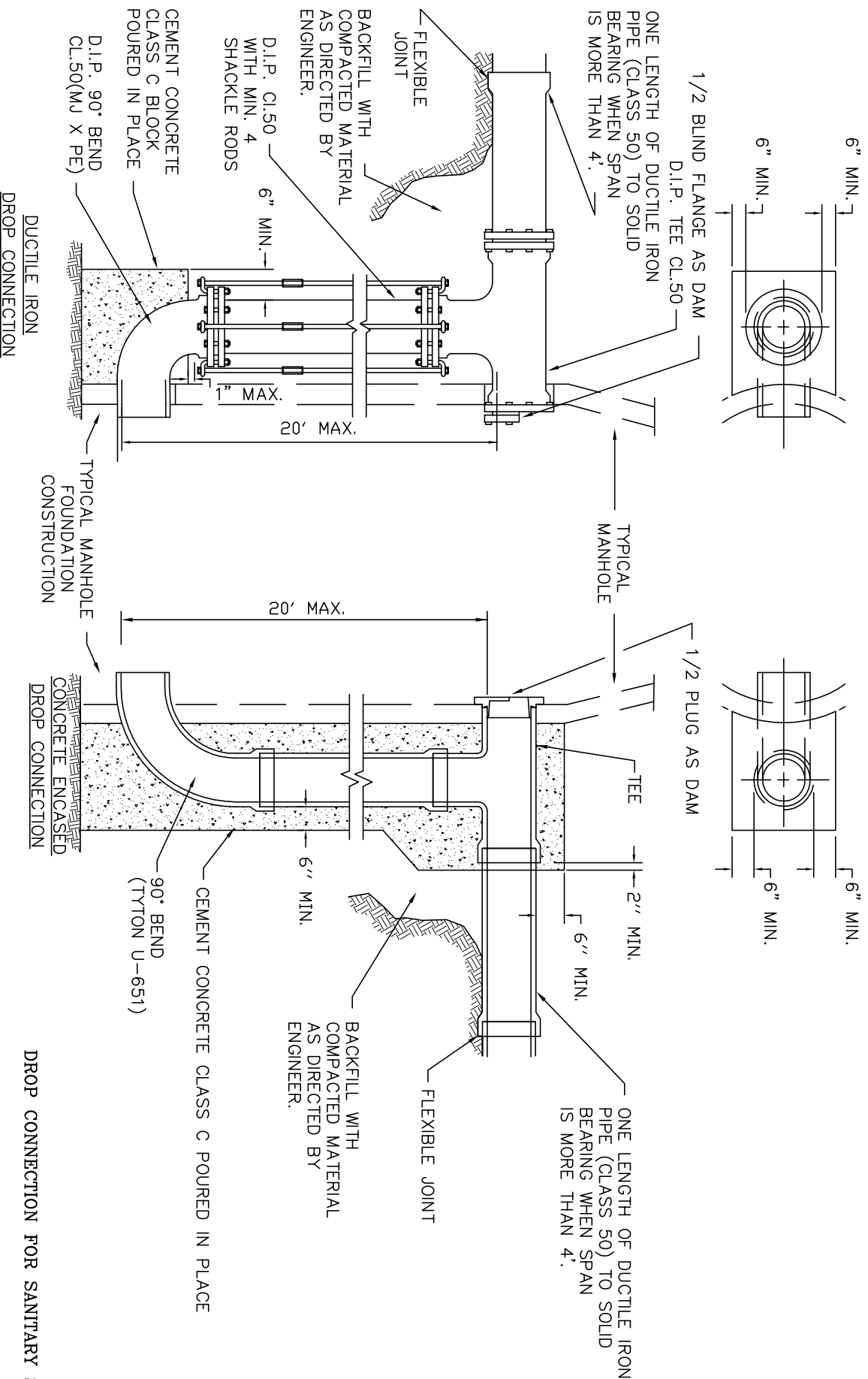
ADOPTED
CITY OF RENTON

STANDARD PLANS
LST DATE: 12/96

DATE	REVISION	BY	APPR'D

DWG. NAME: BR08

SP PAGE: B081



8/97	Changed Dwg Name from BW18 to BR18B	DCV	DT
10/17/96	Edited Text	DCV	AG
3/6/95	Corrected Text	DCV	AG
12/15/92	Corrected Text	RTM	DT
DATE	REVISION	BY	APPR'D

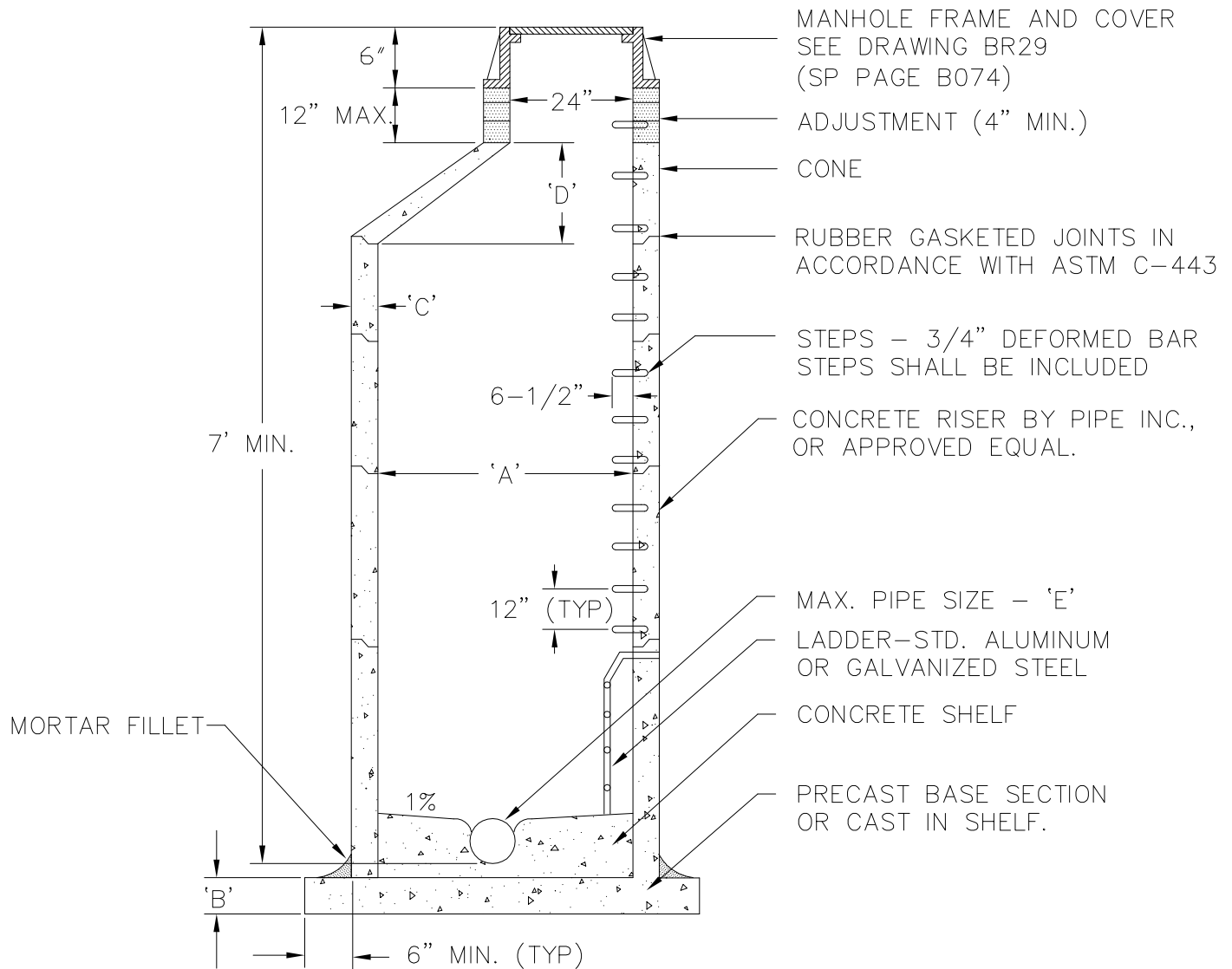


ADOPTED
CITY OF RENTON
STANDARD PLANS
1ST DATE: 8/97

DROP CONNECTION FOR SANITARY SEWERS

DWG. NAME: BR18B

SP PAGE: B075



SANITARY MANHOLE TYPICAL DETAIL
NOT TO SCALE

	'A'	'B'	'C'	'D'	'E'
48" MH	48"	6" MIN.	5" MIN.	24" MIN.	21" I.D.
54" MH	54"	8" MIN.	5.5" MIN.	24" MIN.	24" I.D.
60" MH	60"	8" MIN.	6" MIN.	42" MIN.	30" I.D.

NOTES:

1. STEPS TO BE 3/4" Ø DEFORMED BAR GALVANIZED SAFETY STEPS OR EQUAL.
2. STEPS ARE TO BE IN PLACE BEFORE MANHOLE SECTIONS ARE INSTALLED.
3. CASTING TO BE PER DRAWING BR29.
4. MANHOLE SECTIONS TO BE OF REINFORCED PRECAST CONCRETE.
5. ALL JOINTS SHALL BE GROUTED.
6. SANITARY SEWER MANHOLES SHALL HAVE ALL INTERIOR SURFACES, INCLUDING CHANNELING, COATED (SEALED) WITH A HIGH SOLIDS URETHANE COATING; WASSER MC-CONSEAL OR APPROVED EQUAL; COLOR OF COATING SHALL BE WHITE.
7. RUBBER GASKETED JOINTS SHALL BE IN CONFORMANCE WITH ASTM C-443.
8. CHANNEL HEIGHT SHALL BE A MINIMUM OF 3/4 THE INSIDE DIAMETER OF THE LARGEST PIPE.
9. CONNECTIONS TO MANHOLE SHALL BE MADE USING GPK ADAPTOR, KOR-N-SEAL BOOTS OR APPROVED EQUAL.
10. MANHOLES EQUAL TO AND GREATER THAN 20 FEET DEEP SHALL HAVE A "SURETRACK" CLIMBING AND FALL PROTECTION SYSTEM INSTALLED.

**SANITARY MANHOLE
TYPICAL DETAIL**



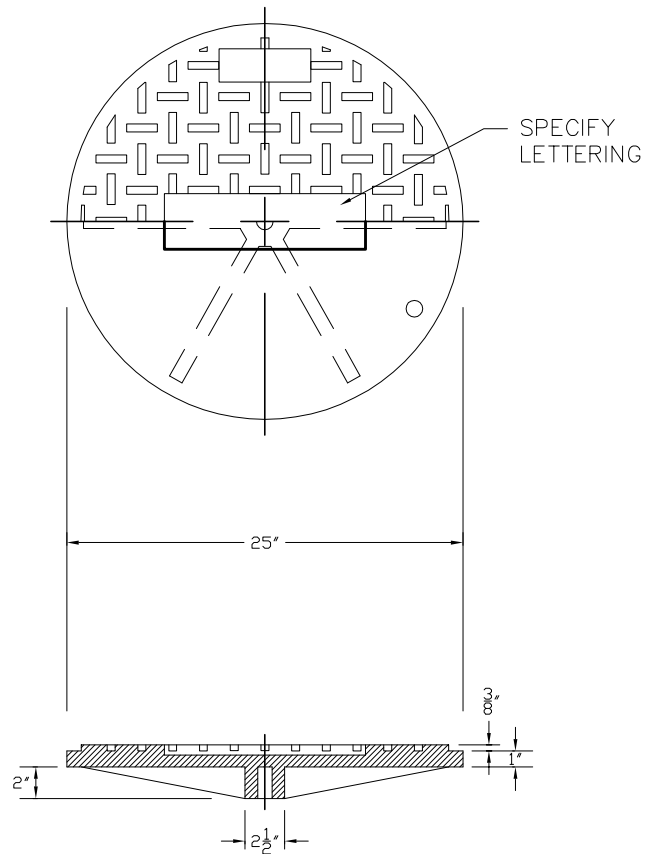
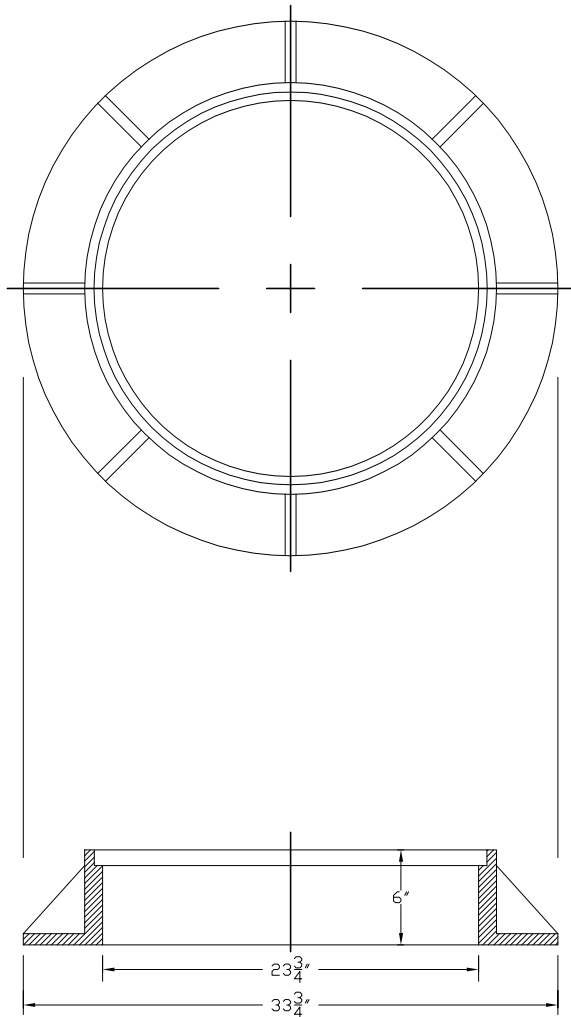
ADOPTED
CITY OF RENTON

STANDARD PLANS
LST DATE: 04/03

04/10/03	Revised notes.	JDH	DMC
10/17/96	Added notes.	DCV	AG
DATE	REVISION	BY	APPR'D

DWG. NAME: BR28

SP PAGE: B071



MANHOLE FRAME AND COVER

NOTES:

1. ALL COVERS SHALL BE LOCKING LID PER INLAND FOUNDRY CO. INC. No. 817 (LOCKING) OR EQUAL.
2. USE FRAME AND COVER FOR STORM (SPECIFY "DRAIN" ON COVER), SANITARY (SPECIFY "SEWER"), OR WATER (SPECIFY "WATER").

04/10/03	Revised notes and Detail.	JDH	DMC
10/17/96	Added notes.	DCV	AG
DATE	REVISION	BY	APPR'D

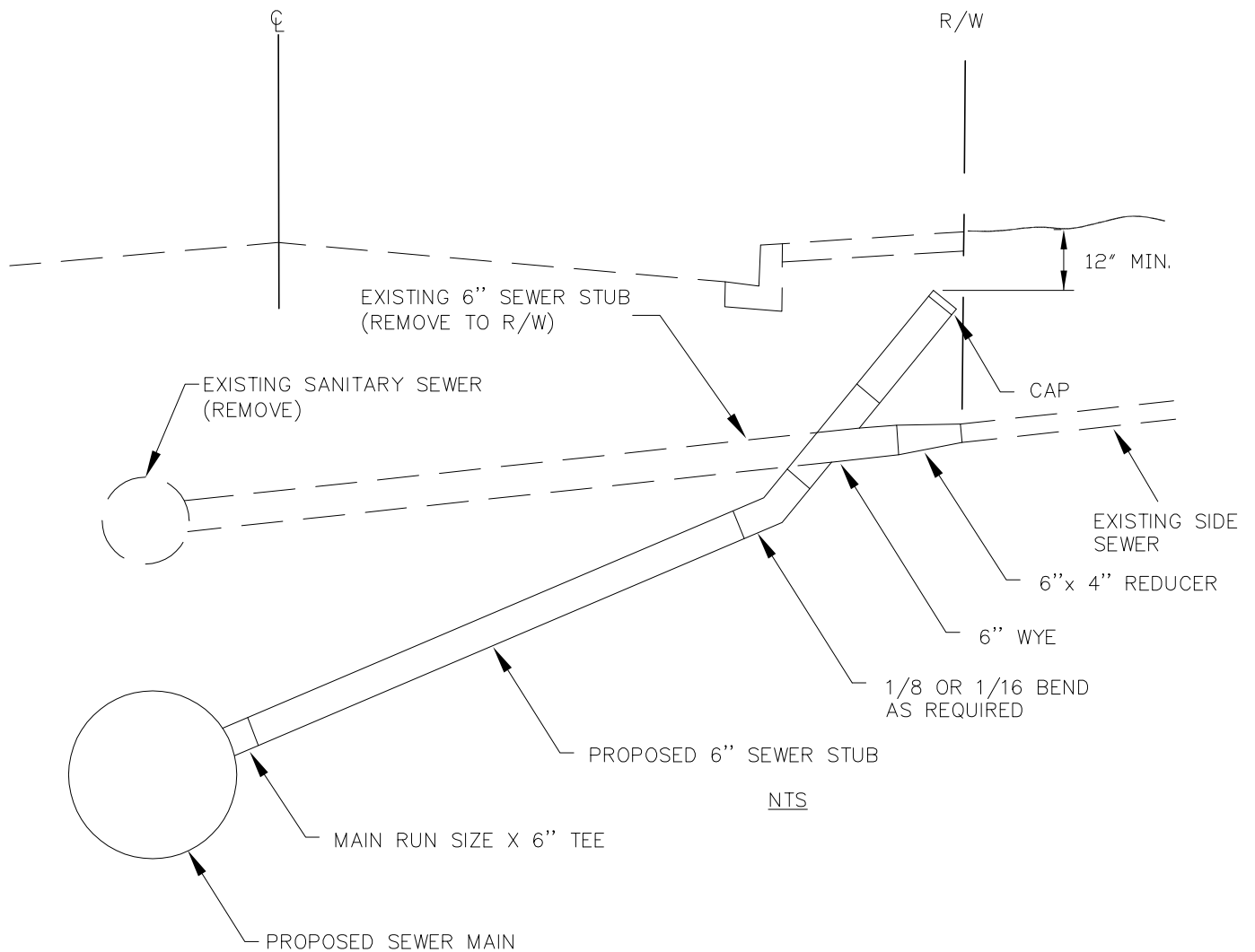


ADOPTED
CITY OF RENTON

STANDARD PLANS
LST DATE: 4/2003

DWG. NAME: BR29

SP PAGE: B074



TYPICAL STUB CONNECTION FOR
SEWER REPLACEMENT

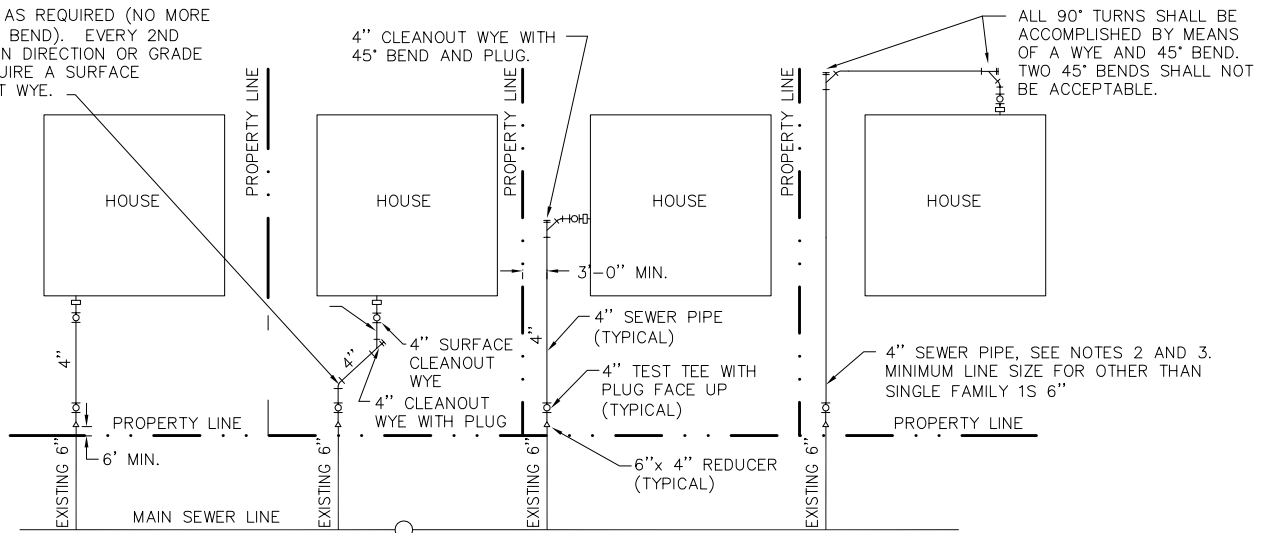


ADOPTED
CITY OF RENTON

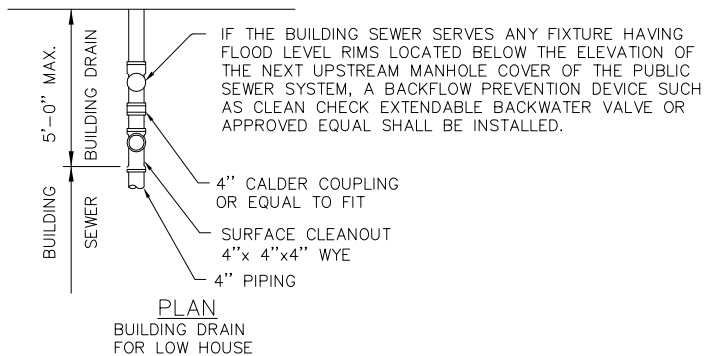
STANDARD PLANS
LST DATE: 12/96

DATE	REVISION	BY	APPR'D

4" BEND AS REQUIRED (NO MORE THAN 45° BEND). EVERY 2ND CHANGE IN DIRECTION OR GRADE WILL REQUIRE A SURFACE CLEANOUT WYE.

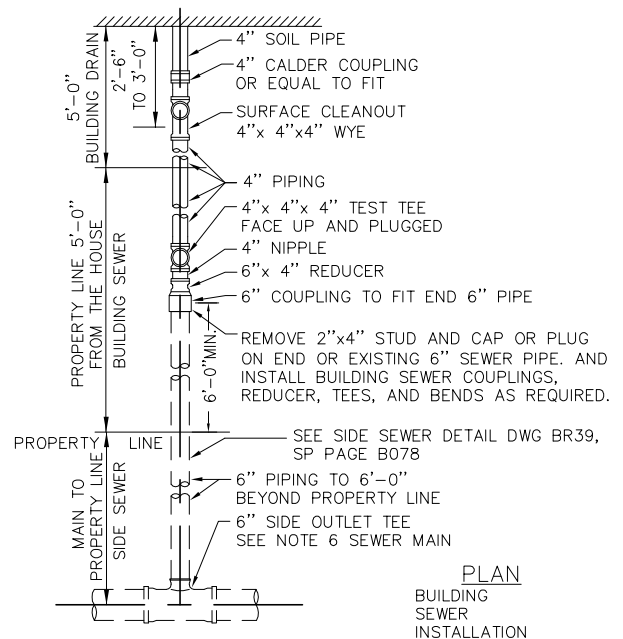


TYPICAL BUILDING SEWER INSTALLATION PLAN



NOTES:

1. Prior to installation of a sanitary sewer connection, a side-sewer permit must be purchased from the City of Renton Public Works Department.
2. Types of pipe and fittings that can be used for sanitary sewers shall be approved by the Department of Public Works. Rubber or neoprene gaskets as specified by the manufacturer, shall be used on joints.
3. A minimum grade of 2% (1/4" per foot) must be maintained with 4" pipe. In the event a 2% grade cannot be maintained, the owner must grant a grade release to the City and then can install 6" pipe at a grade of 1%.
4. For inspection of side sewer, call 24 hours in advance. The inspection phone number is on the side sewer permit. Site must be ready for inspection and representative on site when inspector arrives at appointed time. Side sewer and stub shall be tested per City specifications. Make the connection at the house. Do not backfill the ditch until approval is given by the inspector. Final approval will be granted after the existing septic tank has been pumped out and filled with sand.
5. Install side sewer with 2' minimum cover. 18" cover is allowed at the house if outlet is shallow.
6. If side sewer stub is not available. The owner shall be responsible for its installation. The side sewer shall be a minimum of 6" in size. If tee is not available, the main sewer line must be tapped thru a cast iron saddle. All work within street right-of-way shall be done by a licensed and bonded contractor.
7. All work shall be accomplished in accordance with the Washington Industrial Safety and Health Act. (WISHA)
8. All trench restoration for side sewers in the public right-of-way shall conform to the most current trench restoration requirements as shown on dwg. #HR-23.
9. All building sewer and side sewers shall have bedding in accordance with drawing BW18C or BR09 as applicable.
10. There shall be a minimum 10 foot horizontal separation between sanitary side sewers and water services and a minimum 5 foot horizontal separation between sanitary side sewers and all other utilities.



CALL FOR LOCATIONS BEFORE YOU DIG
48HR LOCATORS 1-800-424-5555

— TYPICAL BUILDING SEWER —
SIDE SEWER (PROPERTY LINE)
TO BUILDING CONNECTION
INSTALLATION PLAN



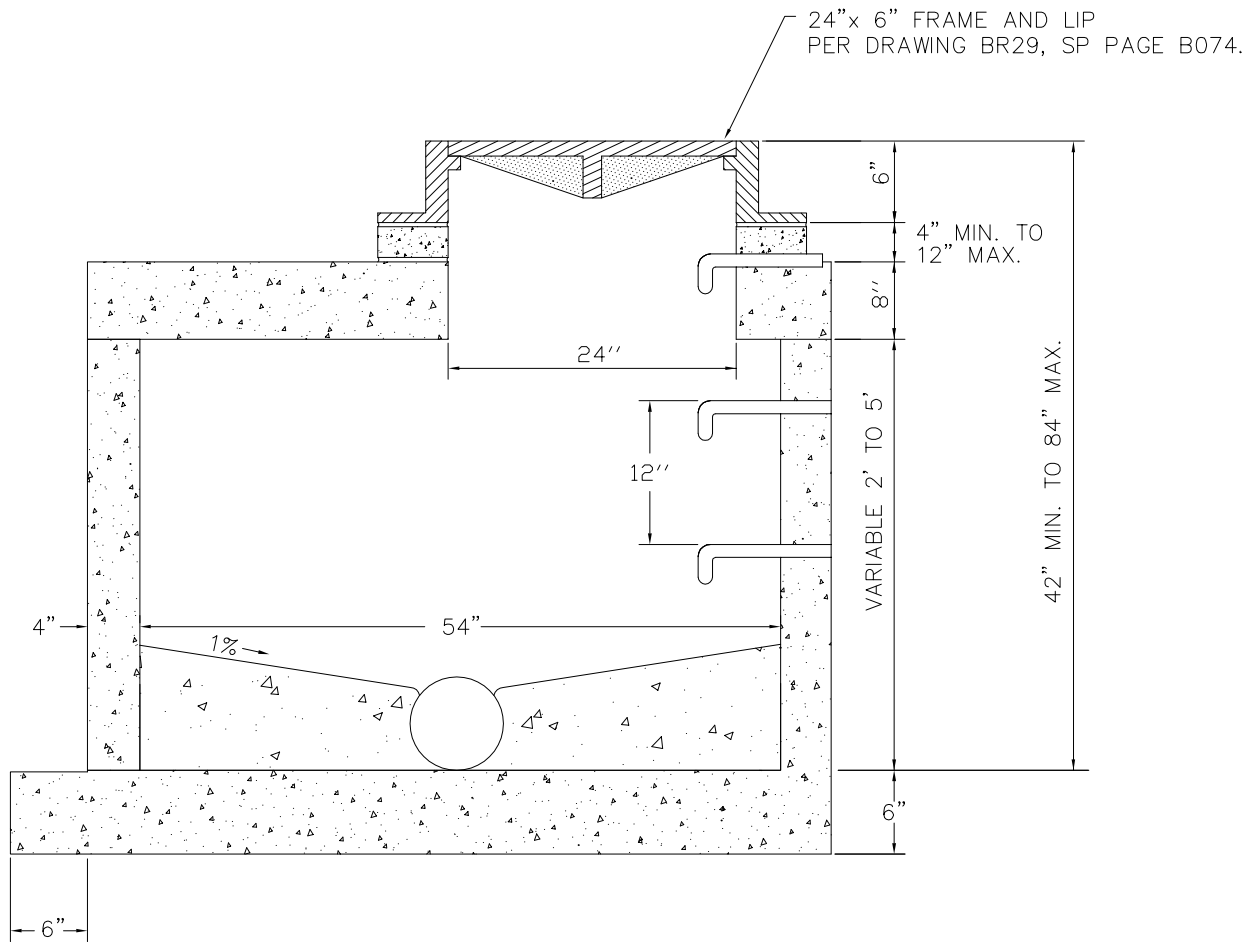
ADOPTED
CITY OF RENTON

STANDARD PLANS
LST DATE: 12/96

DATE	REVISION	BY	APPR'D

DWG. NAME: BR35

SP PAGE: B082



NOTES:

1. STEPS TO BE 3/4" ϕ DEFORMED BAR GALVANIZED SAFETY STEPS OR EQUAL.
2. STEPS ARE TO BE IN PLACE BEFORE MANHOLE SECTIONS ARE INSTALLED.
3. CASTING TO BE PER DRAWING BR29.
4. MANHOLE SECTIONS TO BE OF REINFORCED PRECAST CONCRETE.
5. OPENING SHOULD BE ON DOWNSTREAM SIDE.
6. ALL JOINTS SHALL BE GROUTED.
7. SANITARY SEWER MANHOLES SHALL HAVE ALL INTERIOR SURFACES, INCLUDING CHANNELING, COATED (SEALED) WITH A HIGH SOLIDS URETHANE COATING; WASSER MC-AROSHIELD OR APPROVED EQUAL; COLOR OF COATING SHALL BE WHITE.
8. RUBBER GASKETED JOINTS SHALL BE IN CONFORMANCE WITH ASTM C-443.
9. CHANNEL HEIGHT SHALL BE A MINIMUM OF 3/4 THE INSIDE DIAMETER OF THE LARGEST PIPE.
10. CONNECTIONS TO MANHOLE SHALL BE MADE USING GPK ADAPTOR, KOR-N-SEAL BOOTS OR APPROVED EQUAL.

SANITARY SHALLOW MANHOLE TYPE B



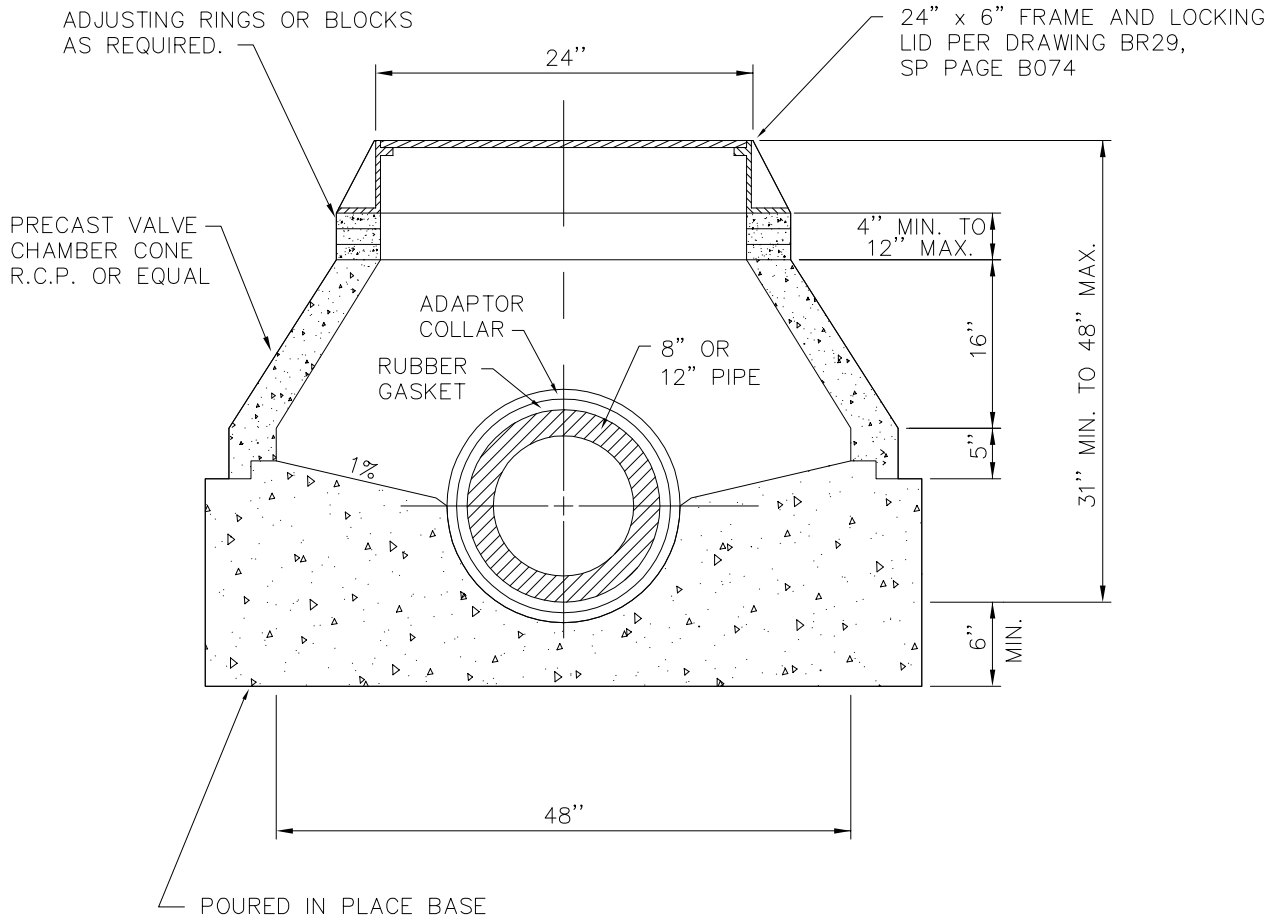
ADOPTED
CITY OF RENTON

STANDARD PLANS
LST DATE: 12/96

10/17/96	EDITED NOTES	DCV	AG
3/8/95	EDITED NOTES	DCV	AG
DATE	REVISION	BY	APPR'D

DWG. NAME: BR37

SP PAGE: B072



NOTES:

1. STEPS TO BE 3/4" ϕ DEFORMED BAR GALVANIZED SAFETY STEPS OR EQUAL.
2. STEPS ARE TO BE IN PLACE BEFORE MANHOLE SECTIONS ARE INSTALLED.
3. CASTING TO BE PER DRAWING BR29.
4. ALL JOINTS SHALL BE GROUTED.
5. SANITARY SEWER MANHOLES SHALL HAVE ALL INTERIOR SURFACES, INCLUDING CHANNELING, COATED (SEALED) WITH A HIGH SOLIDS URETHANE COATING; WASSER MC-AROSHIELD OR APPROVED EQUAL; COLOR OF COATING SHALL BE WHITE.
6. RUBBER GASKETED JOINTS SHALL BE IN CONFORMANCE WITH ASTM C-443.
7. CHANNEL HEIGHT SHALL BE A MINIMUM OF 3/4 THE INSIDE DIAMETER OF THE LARGEST PIPE.
8. CONNECTIONS TO MANHOLE SHALL BE MADE USING GPK ADAPTOR, KOR-N-SEAL BOOTS OR APPROVED EQUAL.

**SANITARY MANHOLE
EXTRA SHALLOW TYPE C**



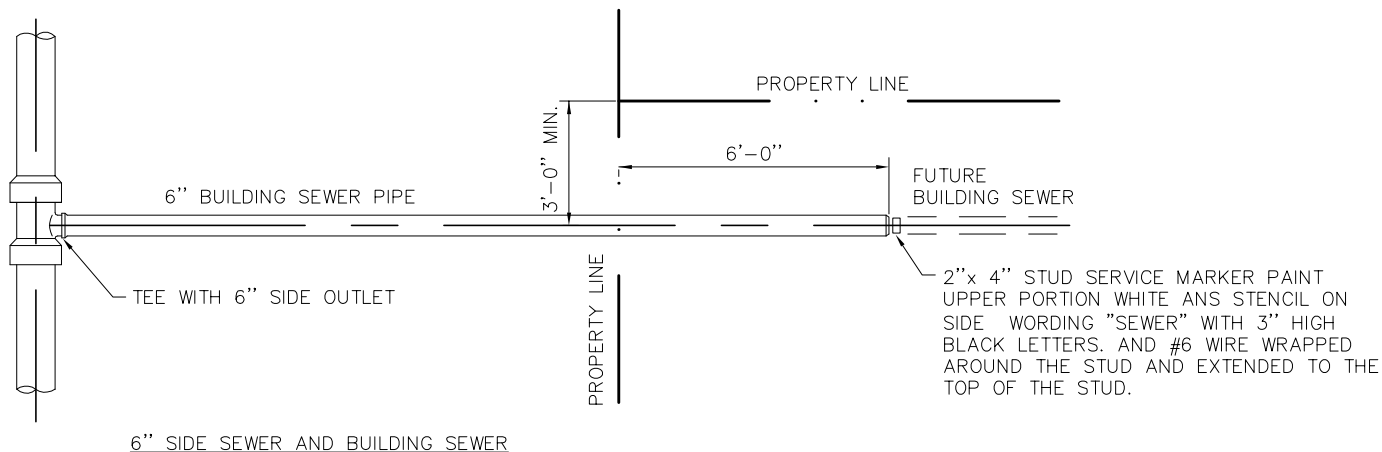
ADOPTED
CITY OF RENTON

STANDARD PLANS
LST DATE: 12/96

10/17/96	Added notes.	DCV	AG
3/9/95	Added note.	DCV	AG
DATE	REVISION	BY	APPR'D

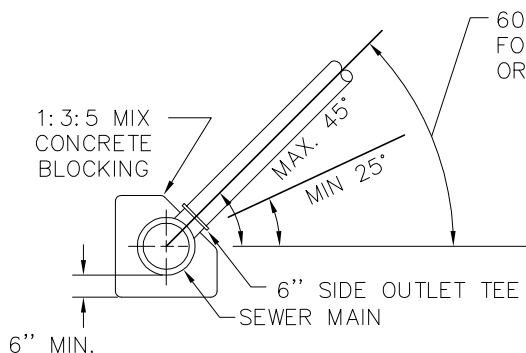
DWG. NAME: BR38

SP PAGE: B073

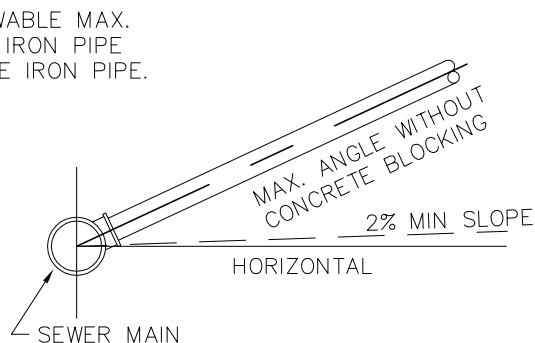


UNLESS OTHERWISE APPROVED BY THE CITY, MAKE TAP THROUGH CAST IRON SADDLE SECURED TO SEWER MAIN WITH STAINLESS STEEL BANDS WHEN CONNECTING NEW SIDE SEWERS TO EXISTING MAIN.

VITRIFIED CLAY, PLAIN AND REINFORCED CONCRETE, D1 PIPE AND C1 PIPE SEWER MAINS ARE TO BE CORE DRILLED



CONCRETE BLOCKING ANGLE
OF TEE AT MAIN OVER 25
ELEVATION



TYPICAL SIDE SEWER ELEVATION

NOTE:
UNLESS OTHERWISE SHOWN ON PLAN, SIDE SEWER SHALL HAVE A MINIMUM 2.5' COVER AT PROPERTY LINE OR 3-5' LOWER THAN THE LOWEST HOUSE ELEVATION, WHICHEVER IS LOWER.

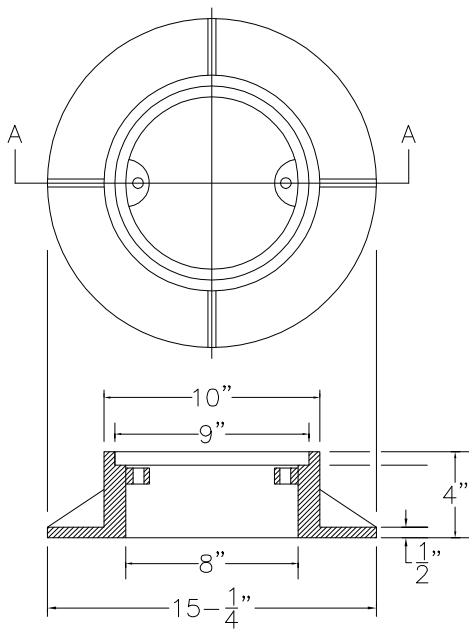
STANDARD SIDE SEWER INSTALLATION
(SEWER MAIN TO PROPERTY LINE)



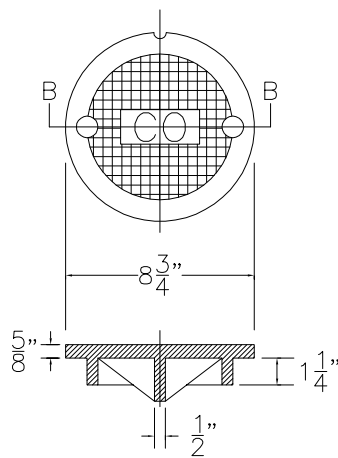
ADOPTED
CITY OF RENTON

STANDARD PLANS
LST DATE: 12/96

10/17/96	Edited note.	DCV	AG
DATE	REVISION	BY	APPR'D

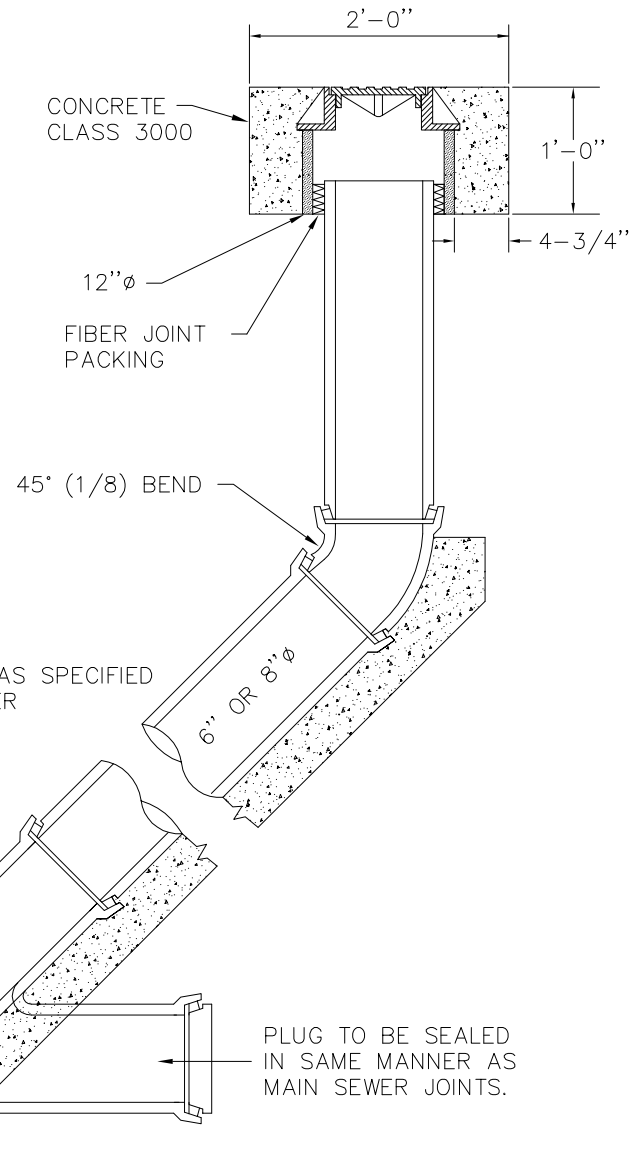


SECTION A-A



SECTION B-B

CAST IRON RING AND COVER



NOTES:

1. ALL CLEANOUTS SHALL BE INLAND FOUNDRY CO. INC. No. 247.
2. IN UNIMPROVED AREAS, POUR A 1'-0" THICK, 2'-0" SQUARE CONCRETE, CLASS 3000, PAD AROUND THE RING AND COVER.
3. IN ASPHALT ROADWAYS, RESTORE AROUND CLEANOUT RING AND COVER AS REQUIRED BY STANDARD DETAIL DRAWING BR36.

6 INCH OR 8 INCH
CLEANOUT



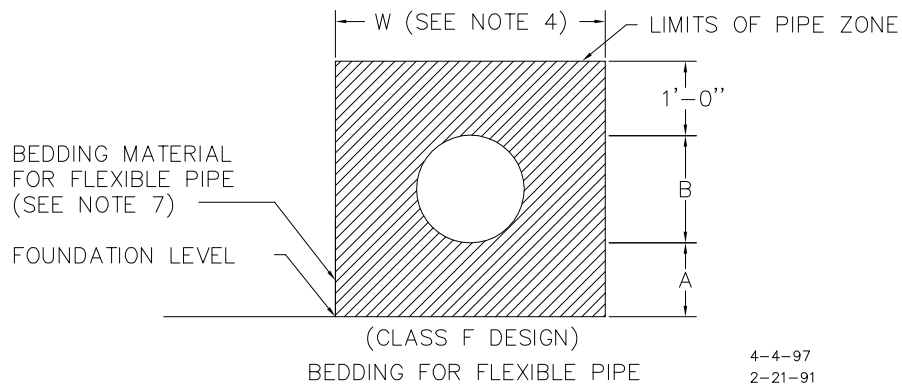
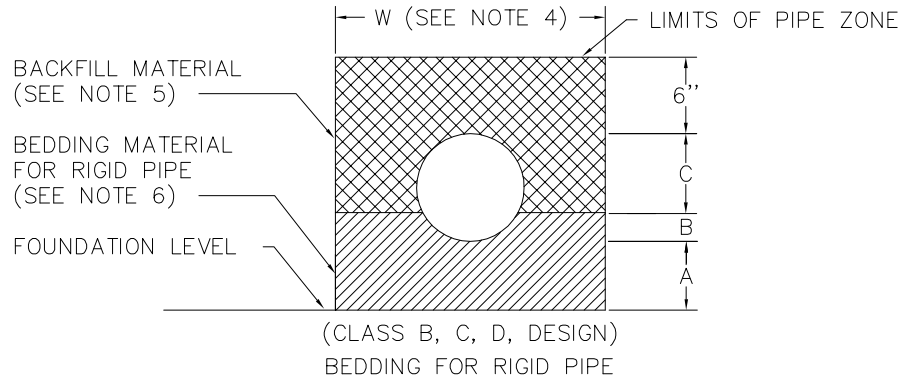
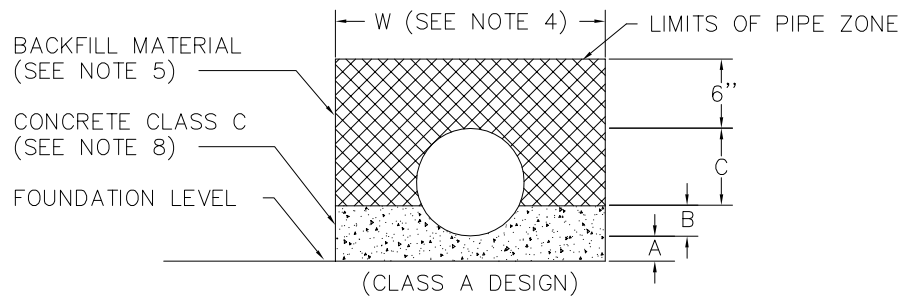
ADOPTED
CITY OF RENTON

STANDARD PLANS
LST DATE: 04/10/2004

04/10/03	Revised notes.	JDH	DMC
10/17/96	Added notes.	DCV	AG
DATE	REVISION	BY	APPR'D

DWG. NAME: BW18B

SP PAGE: B076



4-4-97
2-21-91

NOTES:

1. PROVIDE UNIFORM SUPPORT UNDER BARREL.
2. HAND TAMP UNDER HAUNCHES.
3. COMPACT BEDDING MATERIAL TO 95% MAX. DENSITY EXCEPT DIRECTLY OVER PIPE. HAND TAMP ONLY.
4. SEE "EXCAVATION AND PREPARATION OF TRENCH" IN THE SANITARY SEWERS SECTION OF THE STANDARD SPECIFICATIONS FOR TRENCH WIDTH "W" AND TRENCHING OPTIONS. THE PIPE ZONE WILL BE THE ACTUAL TRENCH WIDTH, EXCEPT FOR CLASS A BEDDING. THE MINIMUM CONCRETE WIDTH SHALL BE 1-1/2 I.D. + 18".
5. TRENCH BACKFILL SHALL CONFORM TO "BACKFILLING SEWER TRENCHES" IN THE SANITARY SEWERS SECTION OF THE STANDARD SPECIFICATIONS, EXCEPT THAT ROCKS OR LUMPS LARGER THAN 1" PER FOOT OF PIPE DIAMETER SHALL NOT BE USED IN THE BACKFILL MATERIAL.
6. SEE "BEDDING MATERIAL FOR RIGID PIPE" IN THE AGGREGATES SECTION OF THE STANDARD SPECIFICATIONS FOR THE MATERIAL SPECIFICATIONS.
7. SEE "BEDDING MATERIAL FOR FLEXIBLE PIPE" IN THE AGGREGATES SECTION OF STANDARD SPECIFICATION FOR THE MATERIAL SPECIFICATIONS.
8. PIPE MUST BE ANCHORED IN SUCH A MANER AS TO ENSURE FLOW LINE IS MAINTAINED.

BEDDING CLASS DESIGN					
DIMENSION	CLASS A	CLASS B	CLASS C	CLASS D	CLASS F
A	4" MIN. 1/4 I.D. 12" MAX.	*	*	ZERO	*
B	1/4 O.D.	1/2 O.D.	1/8 O.D.	ZERO	O.D.
C	3/4 O.D.	1/2 O.D.	1/8 O.D.	O.D.	—

* A = 4" MIN. 27" I.D. AND UNDER
6" MIN. OVER 27" I.D.

PIPE BEDDING FOR SANITARY SEWER



ADOPTED
CITY OF RENTON

STANDARD PLANS
LST DATE: 4/97

	Corrected note 4	DCV	DT
	Revised notes, 4,5,7,& 8. Added note 6	KJ	----
DATE	REVISION	BY	APPR'D

DWG. NAME: BW18C

SP PAGE: B077